

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105**

**AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

**NPDES PERMIT NO. GU0020389**

In compliance with the provisions of the Clean Water Act ("CWA") (Public Law 92-500, as amended, 33 U.S.C. 1251 et seq.), the following discharger is authorized to discharge from the identified facility at the outfall location specified below, in accordance with the effluent limits, monitoring requirements, and other conditions set forth in this permit:

Discharger Name	U.S. Navy, Naval Base Guam
Discharger Address	Naval Fac. Engineering Command, Marianas PSC 455 Box 195 FPO AP, Guam 96540
Facility Name	U.S. Navy Fena Water Treatment Plant
Facility Location Address	U.S. Navy Water Treatment Plant Bldg. 585, Route 2A Santa Rita, Guam 96915
Facility Rating	Minor

Outfall Number	General Type of Waste Discharged	Outfall Latitude	Outfall Longitude	Receiving Water
002	Emergency discharges of filter backwash wastewater and/or clarifier overflow	13° 22' 38" N	144° 40' 51" E	Namo River

This permit was issued on:	February 23, 2017
This permit shall become effective on:	April 1, 2017
This permit shall expire at midnight on:	March 31, 2022

In accordance with 40 CFR 122.21(d), the discharger shall submit a new application for a permit at least 180 days before the expiration date of this permit, unless permission for a date no later than the permit expiration date has been granted by the Director.

Signed this 23rd day of February, 2017, for the Regional Administrator.

\_\_\_\_\_/s/  
Tomás Torres, Director  
Water Division

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## **Part I. EFFLUENT LIMITS AND MONITORING REQUIREMENTS**

### ***A. Effluent Limits and Monitoring Requirements***

1. Effluent Limits – Outfall Number 002  
The discharger is authorized to discharge filter backwash wastewater and/or clarifier overflow from settling tanks used in the treatment process, in compliance with the effluent limits and monitoring requirements specified in this permit, summarized in Table 1.
2. The discharge of pollutants to waters of the United States at any point other than outfall (002) is prohibited.
3. The discharge from any point other than the backwash settling tank via outfall 002 in the treatment process is prohibited.
4. The discharge of toxic substances in toxic amounts, including, but not limited to, pesticides, herbicides, heavy metals, and organic chemicals, is prohibited.
5. The discharge shall be free from substances, conditions, or combinations that:
  - a. Cause visible floating materials, debris, oil, grease, scum, foam, and other floating material which degrade water quality or use;
  - b. Produce visible turbidity, settle to form deposits or otherwise adversely affect aquatic life;
  - c. Produce objectionable color, odor, or taste, directly, or by chemical or biological action;
  - d. Injure or are toxic or harmful to humans, animals, plants or aquatic life; and
  - e. Induce the growth of undesirable aquatic life.
6. The discharge shall not cause the following conditions in the receiving water:
  - a. Concentrations of suspended matter at any point to be increased more than 25% from ambient at any time, and the total concentration should not exceed 40 mg/L, except when due to natural conditions,
  - b. Temperature to deviate more than 1.0 degree Centigrade from ambient conditions;
  - c. pH outside the range of 6.5 to 9.0 standard units,
  - d. Orthophosphate concentrations to exceed 0.10 mg/L,
  - e. Nitrate-nitrogen concentration to exceed 0.50 mg/L and ammonia concentrations to exceed 0.02 mg/L,

- f. Turbidity to exceed 1.0 NTU over ambient conditions, except when due to natural conditions;
  - g. Concentration of dissolved oxygen to be less than 75% of saturation;
  - h. Alterations of the marine environment that would alter the salinity of marine waters of Guam more than 10% of the ambient conditions, except when due to natural conditions; and
  - i. Toxic substances in the receiving water that:
    - (1) Produce detrimental physiological, acute, or chronic responses in human, plant, animal or aquatic life, and
    - (2) Produce contamination in harvestable aquatic life to the extent that it causes detrimental physiological, acute or chronic responses in humans or protected wildlife, when consumed.
    - (3) Result in the survival of aquatic life subject to the discharge to be less than that for the same water body in areas unaffected by the discharge.
5. The discharge of any radioactive wastes and contaminated radioactive materials is strictly prohibited.

**B. Table 1. Numeric Effluent Limits and Effluent Monitoring Requirements – Outfall 002**

Parameter <sup>(1)</sup>	Maximum Allowable Discharge Limits (Concentration)		Effluent Monitoring Requirements	
	Concentration and Loading		Frequency <sup>(2)</sup>	Sample Type <sup>(3)</sup>
	Max. Daily	Units		
Flow rate	(4)	MGD	Continuous	Calculated
pH (hydrogen ion)	between 6.5 – 9.0 at all times	Std. Units	Continuous	Metered
Turbidity	1.0 greater than receiving water body	NTU	1x/discharge	Discrete
Settable solids	45.0	mg/L	1x/discharge	Discrete
Total dissolved solids	1,000.0	mg/L	1x/discharge	Discrete
Chlorine, total residual (TRC)	11.0	µg/L	1x/discharge	Discrete
Total aluminum	1.0	mg/L	1x/discharge	Discrete
Nitrate-nitrite (as N)	0.5	mg/L	1x/discharge	Discrete
Fluoride	0.8	mg/L	1x/discharge	Discrete
Copper	3.0	µg/L	1x/discharge	Discrete
Mercury	0.051	µg/L	1x/discharge	Discrete
Cadmium	3.9	µg/L	1x/discharge	Discrete
Chromium VI	16.0	µg/L	1x/discharge	Discrete
Selenium	20.0	µg/L	1x/discharge	Discrete
Silver	4.1	µg/L	1x/discharge	Discrete
Zinc	120	µg/L	1x/discharge	Discrete
Chloroform	470.0	µg/L	1x/discharge	Discrete
Dichlorobromomethane	46.0	µg/L	1x/discharge	Discrete
Heptachlor	0.00021	µg/L	1x/discharge	Discrete

Note: ‘MGD’ indicates units of Million Gallons per Day and ‘NTU’ is Nephelometric Turbidity Units.

(1) All metals shall be measured and reported in terms of total recoverable.

(2) Continuous monitoring only required during discharge. Annual monitoring required one time/calendar year. If a discharge does not occur during the year, discharger does not have to sample that year for pollutants with annual monitoring requirements.

(3) Sample type is discrete because the discharge occurs in batches. Discrete samples shall be taken when the concentration of pollutants are at their highest. If a peak concentration time is not determined, the sample shall be pulled during the first thirty minutes of discharge. If the discharge time exceeds 3 hours, another discrete sample must be analyzed and reported.

(4) No effluent limit is set at this time, but monitoring and reporting is required.

**C. Receiving Water Monitoring for Turbidity**

1. The permittee shall conduct the monitoring described in Table 1 for turbidity at a location upstream and downstream of the discharge during the duration of the discharge. The upstream monitoring location (UR-1) shall be a single location immediately upstream of the outfall and the downstream monitoring location (UR-2) shall be a single location at least 200 feet downstream of the outfall.
2. The receiving water must not exceed narrative water quality standards, as described in I.A, Effluent Limits, above.

3. Receiving water monitoring results shall be submitted along with effluent monitoring information in the facility's DMR, in accordance with Part I. Section E.
4. The permittee shall sample receiving water hardness at the downstream monitoring location UR-2.

**D. Sampling**

1. Samples and measurements shall be representative of the volume and nature of the discharge.
2. Samples shall be taken after any in-plant return flows and the last treatment process and prior to mixing with the receiving waters, where representative samples of the discharge can be obtained. For outfall 002, this means at the top of the backwash settling tank during a discharge event.
3. If the discharge is intermittent rather than continuous, then on the first day of each intermittent discharge, the permittee shall monitor and record data for all the parameters listed in the monitoring requirements, after which the frequencies of analysis listed in the monitoring requirements shall apply for the duration of each such intermittent discharge. The permittee is not required to take effluent samples when there is no discharge.
4. For any unauthorized discharge, such as those that might occur from places other than outfall 002 or from overflows from parts of the treatment process, the permittee shall:
  - a. Monitor for parameters specified in Table 2:

**Table 2. Monitoring Requirements for Authorized Discharges**

Parameter	Units	Sample Type <sup>(1)</sup>
Total flow	mgd	Estimate
pH	s.u.	Discrete
Turbidity	NTU	Discrete
Settleable solids	mg/L	Discrete
TRC	µg/L	Discrete
Aluminum <sup>(2)</sup>	µg/L	Discrete
Copper <sup>(2)</sup>	µg/L	Discrete
Mercury <sup>(2)</sup>	µg/L	Discrete
Zinc <sup>(2)</sup>	µg/L	Discrete
Chlorodibromomethane	µg/L	Discrete
Chloroform	µg/L	Discrete
Dichlorobromomethane	µg/L	Discrete
Heptachlor	µg/L	Discrete

- (1) One discrete pH sample shall be taken within 10 minutes of the discovery of the authorized discharge. One additional pH discrete sample shall be taken per additional hour of an authorized discharge.
- (2) All metals shall be measured and reported in terms of total recoverable.

- b. Report the authorized discharge, as specified in Part III.B - Special Conditions, Twenty-Four Hour Reporting of Noncompliance.

#### ***E. General Monitoring and Reporting Requirements***

1. All monitoring shall be conducted in accordance with 40 CFR 136 test methods, unless otherwise specified in this permit. For influent and effluent analyses required in this permit, the permittee shall utilize 40 CFR 136 test methods with method detection limits (“MDLs”) and minimum reporting limit (“MRLs”) that are lower than the effluent limits in this permit. For parameters without an effluent limit, the permittee must use an analytical method at or below the level of the applicable water quality criterion for the measured pollutant or the amount of the pollutant is high enough that the method detects and quantifies the level of pollutant in the discharge.. If all MDLs or MRLs are higher than these effluent limits or criteria concentrations, then the permittee shall utilize the test method with the lowest MDL or MRL. In this context, the permittee shall ensure that the laboratory utilizes a standard calibration where the lowest standard point is equal to or less than the MRL. Influent and effluent analyses for metals shall measure “total recoverable metal”, except as provided under 40 CFR 122.45(c).
2. As an attachment to the first discharge monitoring report (“DMR”), the permittee shall submit, for all parameters with monitoring requirements specified in this permit:
  - a. The test method number or title and published MDL or MRL,
  - b. The preparation procedure used by the laboratory,
  - c. The laboratory’s MDL for the test method computed in accordance with Appendix B of 40 CFR 136,
  - d. The standard deviation (S) from the laboratory’s MDL study,
  - e. The number of replicate analyses (n) used to compute the laboratory’s MDL, and
  - f. The laboratory’s lowest calibration standard.

As part of each DMR submittal, the permittee shall certify that there are no changes to the laboratory’s test methods, MDLs, MRLs, or calibration standards. If there are any changes to the laboratory’s test methods, MDLs, MRLs, or calibration standards, these changes shall be summarized in an attachment to the subsequent DMR submittal.

3. The permittee shall develop a Quality Assurance (“QA”) Manual for the field collection and laboratory analysis of samples. The purpose of the QA Manual is to assist in planning for the collection and analysis of samples and explaining data anomalies if they occur. At a minimum, the QA Manual shall include the following:

- a. Identification of project management and a description of the roles and responsibilities of the participants; purpose of sample collection; matrix to be sampled; the analytes or compounds being measured; applicable technical, regulatory, or program-specific action criteria; personnel qualification requirements for collecting samples;
  - b. Description of sample collection procedures; equipment used; the type and number of samples to be collected including QA/Quality Control (“QC”) samples; preservatives and holding times for the samples (see 40 CFR 136.3); and chain of custody procedures;
  - c. Identification of the laboratory used to analyze the samples; provisions for any proficiency demonstration that will be required by the laboratory before or after contract award such as passing a performance evaluation sample; analytical method to be used; MDL and MRL to be reported; required QC results to be reported (e.g., matrix spike recoveries, duplicate relative percent differences, blank contamination, laboratory control sample recoveries, surrogate spike recoveries, etc.) and acceptance criteria; and corrective actions to be taken in response to problems identified during QC checks; and
  - d. Discussion of how the permittee will perform data review, report results, and resolve data quality issues and identify limits on the use of data.
4. Throughout all field collection and laboratory analyses of samples, the permittee shall use the QA/QC procedures documented in their QA Manual. If samples are tested by a contract laboratory, the permittee shall ensure that the laboratory has a QA Manual on file. A copy of the permittee’s QA Manual shall be retained on the permittee’s premises and available for review by regulatory authorities upon request. The permittee shall review its QA Manual annually and revise it, as appropriate.
5. Samples collected during each month of the reporting period must be reported on DMR forms, as follows:
- a. For a *maximum daily* permit limit or monitoring requirement when one or more samples are collected during the month, report either:  
  
The *maximum value*, if the maximum value of all analytical results is greater than or equal to the MRL; or  
*NODI (Q)*, if the maximum value of all analytical results is greater than or equal to the laboratory’s MDL, but less than the MRL; or  
*NODI (B)*, if the maximum value of all analytical results is less than the laboratory’s MDL.
  - b. For an *average weekly* or *average monthly* permit limit or monitoring requirement when only one sample is collected during the week or month, report either:  
  
The *maximum value*, if the maximum value of all analytical results is greater than



or equal to the MRL; or  
*NODI (Q)*, if the maximum value of all analytical results is greater than or equal to the laboratory's MDL, but less than the MRL; or  
*NODI (B)*, if the maximum value of all analytical results is less than the laboratory's MDL.

- c. For an *average weekly* or *average monthly* permit limit or monitoring requirement when more than one sample is collected during the week or month, report:

The *average value* of all analytical results where 0 (zero) is substituted for *NODI (B)*, and the laboratory's MDL is substituted for *NODI (Q)*.

6. In addition to information requirements specified under 40 CFR 122.41(j)(3), records of monitoring information shall include: the laboratory which performed the analyses and any comment, case narrative, or summary of results produced by the laboratory. The records should identify and discuss QA/QC analyses performed concurrently during sample analyses and whether project and 40 CFR 136 requirements were met. The summary of results must include information on initial and continuing calibration, surrogate analyses, blanks, duplicates, laboratory control samples, matrix spike and matrix spike duplicate results, and sample condition upon receipt, holding time, and preservation.
7. All monitoring results shall be submitted in such a format as to allow direct comparison with the effluent limits, monitoring requirements, and conditions of this permit. The permittee must sign and certify all electronic submissions in accordance with the requirements of Part V.A.1.k. of this permit ("Signatory Requirements"). Monthly Discharge Monitoring Reports (DMRs) shall be submitted by the 28<sup>th</sup> day of the month following the previous reporting period. For example, under monthly submission the DMR form for January is due by February 28<sup>th</sup>, and under quarterly submission, the three DMR forms for January, February, and March are due on April 28<sup>th</sup>. Monitoring and reporting schedules are as follows:

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	DMR Due Date
Continuous	Permit effective date	Continuous	28 <sup>th</sup> day of the month following calendar quarter
Once/Day <sup>(1)</sup>	Permit effective date	Midnight through 11:59 p.m.	28 <sup>th</sup> day of the month following calendar quarter
Once/Week	Permit effective date	Sunday through Saturday	28 <sup>th</sup> day of the month following calendar quarter

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	DMR Due Date
Once/Month	Permit effective date	First day of the calendar month through last day of the calendar month	28 <sup>th</sup> day of the month following calendar quarter
Once/Quarter	Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	28 <sup>th</sup> day of the month following calendar quarter
Once/Year	January 1 following permit effective date	January 1 through December 31	January 28, each year

(1) Once per day as it relates to composite or discrete samples shall be taken over the course of a single discharge. If the discharge is less than 24 hours, composite samples shall be taken at regular intervals for the duration of the discharge.

A DMR must be submitted for the reporting period even if there was not any discharge. If there is no discharge from the facility during the reporting period, the permittee shall submit a DMR indicating no discharge as required.

8. The permittee must electronically submit compliance monitoring data and reports using the electronic reporting tools provided by EPA Region 9 (NetDMR and NeT). The permittee must electronically report DMRs using NetDMR and may cease mailing paper DMRs. NetDMR is accessed from the internet at <http://www.epa.gov/netdmr>.

## Part II. STANDARD CONDITIONS

The permittee shall comply with all EPA Region 9 Standard Conditions included in an attachment to this permit (see Attachment A).

## Part III. SPECIAL CONDITIONS

### A. Permit Reopener(s)

1. In accordance with 40 CFR 122 and 124, this permit may be modified by EPA to include effluent limits, monitoring, or other conditions to implement new regulations, including EPA-approved water quality standards; or to address new information indicating the presence of effluent toxicity or the reasonable potential for the discharge to cause or contribute to exceedances of water quality standards. EPA may also make permit modification in response to new information presented by the permittee, if appropriate.
2. In accordance with 40 CFR 122.44(c), EPA may promptly modify or revoke and reissue any permit issued to a treatment works treating domestic sewage (including “sludge only

facilities”) to incorporate any applicable standard for sewage sludge use or disposal promulgated under section 405(d) of the CWA, if the standard for sewage sludge use or disposal is more stringent than any requirements for sludge use or disposal in the permit, or controls a pollutant or practice not limited in the permit.

***B. Twenty-Four Hour Reporting of Noncompliance***

1. The permittee shall report any noncompliance which may endanger human health or the environment. The permittee is required to provide an oral report by directly speaking with the EPA and the Guam EPA within 24 hours from the time the permittee becomes aware of non-compliance. If the permittee is unsuccessful in reaching a staff person, the permittee shall provide notification by 9 a.m. on the first business day following the noncompliance. The permittee shall notify EPA and the Guam EPA at the following telephone numbers:

U.S. Environmental Protection Agency, Enforcement Division  
(415) 972-6577

Guam Environmental Protection Agency Administrator  
(671) 475-1658

The permittee shall follow up with a written submission within five days of the time the permittee becomes aware of non-compliance. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The following shall be included as information which must be reported within 24 hours under this paragraph.

- a. Any unanticipated bypass which exceeds any effluent limit in the permit (see 40 CFR 122.44(g)).
  - b. Any upset which exceeds any effluent limit in the permit.
2. EPA may waive the written report on a case-by-case basis for reports required under paragraph B.1, if the oral report has been received within 24 hours.

***C. Best Management Practices***

1. The permittee shall minimize the frequency and impacts of unauthorized discharges or spills.

2. The permittee shall contain and divert all discharges and upsets as to avoid or reduce the contamination of flow from potential sources of pollution.
3. The permittee shall clean all potential drainage areas that are possible sources of pollutants, using such measures as sweeping at regular intervals, keeping materials orderly and labeled, and storing materials in appropriate containers.

**D. Section 401 Water Quality Certification Conditions**

1. Guam EPA supports and concurs with Paragraph E, Anti-Degradation Policy. The permit contains effluent limits and monitoring requirements to ensure that all applicable water quality standards are met, including US EPA's antidegradation policy at 40 CFR 131.12 and at Section 5101.B of Guam EPA's water quality standards. The permit does not include a mixing zone, and therefore, all effluent limits apply at the end of pipe without consideration of dilution in the receiving water.
2. Guam EPA concurs with Part I: Effluent Limits and Monitoring Requirements, set forth in Paragraph A, Table 1 numeric limits and monitoring requirements in outfall 002 and Paragraph C, Table 2, upstream and downstream water monitoring requirements. Parameters described in Part I Paragraph A must also be monitored and results included in the submittal on receiving water monitoring reports.
3. Permittee must monitor the parameters listed in Part 1.A.5-6, except the pH, nitrate, and turbidity because they are already listed in Table 1, monitoring permit requirements for the discharge. The permittee must designate and locate ambient sampling monitoring points and submit coordinates to Guam EPA.
4. When the permittee develops and publishes the Quality Assurance (QA) Manual for field collection and laboratory's test methods, a copy must be submitted to Guam EPA.
5. All DMR reports that are electronically submitted to US EPA must cc copy to Guam EPA. Pursuant to Section 5104.A.12 of Guam EPA's WQS. The standard states "that every permitted facility that discharges effluent to waters of Guam shall submit operating reports to the agency."
6. Navy Base Guam must provide coordinates of the upstream and downstream receiving water's monitoring stations (UR-1 & UR-2) to Guam EPA.
7. The discharge shall take immediate corrective actions or engineering measures to address significant non-compliance with water standards and/or environmental protection requirements and notify the Agency within 24 hours from the time the permittee becomes aware of non-compliance. Copies of all written/electronic submissions to US EPA will be forwarded to Guam EPA.

8. Facility Standard Operating Procedures (SOP's) must address the inventory, storage, and documentation of corrosive acids and strong base oxidizers. Public notice of these chemical's material safety data sheets should be available when requested and/or required when the quantity thresholds are not met.
9. The treatment plant discharge operators must be WWTP level II and must continue to be trained on the current SOPs, treatment processes, equipment operations and proper maintenance.

## **Part IV. ATTACHMENTS**

### **A. Attachment A: Standard Permit Conditions**

#### **1. All NPDES Permits**

In accordance with 40 CFR 122.41, the following conditions apply to all NPDES permits and are expressly incorporated into this permit.

- a. Duty to comply; at 40 CFR 122.41(a).

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the CWA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

- (1) The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under 405(d) of the CWA within the time provided in the regulations that established these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
- (2) The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who *negligently* violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both. Any person who *knowingly* violates such sections, or such conditions or limitations is subject to criminal

penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, such as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.

- (3) Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.

- b. Duty to reapply; at 40 CFR 122.41(b).

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.

- c. Need to halt or reduce activity not a defense; at 40 CFR 122.41(c).

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

- d. Duty to mitigate; at 40 CFR 122.41(d).

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

- e. Proper operation and maintenance; at 40 CFR 122.41(e).

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit.

Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

- f. Permit actions; at 40 CFR 122.41(f).

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

- g. Property rights; at 40 CFR 122.41(g).

This permit does not convey any property rights of any sort, or any exclusive privilege.

- h. Duty to provide information; at 40 CFR 122.41(h).

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Director upon request, copies of records required to be kept by this permit.

- i. Inspection and entry; at 40 CFR 122.41(i).

The permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

- (1) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- (4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location.

- j. Monitoring and records; at 40 CFR 122.41(j).

- (1) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
  - (2) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample measurement, report or application. This period may be extended by request of the Director at any time.
  - (3) Records of monitoring information shall include:
    - (i) The date, exact place, and time of sampling or measurements;
    - (ii) The individual(s) who performed the sampling or measurements;
    - (iii) The date(s) analyses were performed
    - (iv) The individuals(s) who performed the analyses;
    - (v) The analytical techniques or methods used; and
    - (vi) The results of such analyses.
  - (4) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR part 503, unless other test procedures have been specified in the permit.
  - (5) The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.
- k. Signatory requirement; at 40 CFR 122.41(k).
- (1) All applications, reports, or information submitted to the Director shall be signed and certified. (See 40 CFR 122.22.)
  - (2) The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or



reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

1. Reporting requirements; at 40 CFR 122.41(l).

(1) Planned changes. The permittee shall give notice to the Director as soon as possible of any planned physical alternations or additions to the permitted facility. Notice is required only when:

- (i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
- (ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1).
- (iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, an such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;

(2) Anticipated noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(3) Transfers. This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the CWA. (See 40 CFR 122.61; in some cases, modification or revocation and reissuance is mandatory.)

(4) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

- (i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices.
- (ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or, in the case of sludge use or disposal, approved under 40 CFR part 503, or as specified in the permit, the results of such monitoring shall be included in

the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.

- (iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.
- (5) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- (6) Twenty-four hour reporting.
- (i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
  - (ii) The following shall be included as information which must be reported within 24 hours under this paragraph.
    - (A) Any unanticipated bypass which exceeds any effluent limitation in the permit. (See 40 CFR 122.41(g).)
    - (B) Any upset which exceeds any effluent limitation in the permit.
    - (C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. (See 40 CFR 122.44(g).)
  - (iii) The Director may waive the written report on a case-by-case basis for reports under 40 CFR 122.41(l)(6)(ii) of this section if the oral report has been received within 24 hours.
- (7) Other noncompliance. The permittee shall report all instances of noncompliance not reported under 40 CFR 122.41(l)(4), (5), and (6) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (l)(6) of this section.
- (8) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a

permit application or in any report to the Director, it shall promptly submit such facts or information.

m. Bypass; at 40 CFR 122.41(m).

(1) Definitions.

- (i) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- (ii) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(2) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 40 CFR 122.41(m)(3) and (m)(4) of this section.

(3) Notice.

- (i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
- (ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (l)(6) of this section (24-hour notice).

(4) Prohibition of bypass.

- (i) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:
  - (A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - (B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and

(C) The permittee submitted notices as required under paragraph (m)(3) of this section.

(ii) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph (m)(4)(i) of this section.

n. Upset; at 40 CFR 122.41(n).

(1) Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent cause by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

(2) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (n)(3) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(3) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(i) An upset occurred and that the permittee can identify the cause(s) of the upset;

(ii) The permitted facility was at the time being properly operated; and

(iii) The permittee submitted notice of the upset as required in paragraph (l)(6)(ii)(B) of this section (24 hour notice).

(iv) The permittee complied with any remedial measures required under paragraph (d) of this section.

(4) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

***B. Attachment B: Standard Conditions Established by EPA Region 9 for All NPDES Permits***

1. Duty to reapply; at 40 CFR 122.21(d).

a. Any POTW with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later

date has been granted by the Director. (The Director shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)

- b. All other permittees with currently effective permits shall submit a new application 180 days before the existing permit expires, except that the Regional Administrator may grant permission to submit an application later than the deadline for submission otherwise applicable, but no later than the permit expiration date.
2. Signatories to permit applications and reports; at 40 CFR 122.22.
    - a. Applications. All permit applications shall be signed as follows:
      - (1) For a corporation. By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

Note: EPA does not require specific assignments or delegations of authority to responsible corporate officers identified in 40 CFR 122.22(a)(1)(i). The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under 40 CFR 122.22(a)(1)(ii) rather than to specific individuals.
      - (2) For a partnership or sole proprietorship. By a general partner or the proprietor, respectively; or
      - (3) For a municipality, State, Federal, or other public agency. By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).
    - b. All reports required by permits, and other information requested by the Director shall be signed by a person described in paragraph (a) of this section, or by a duly

authorized representative of that person. A person is a duly authorized representative only if:

- (1) The authorization is made in writing by a person described in paragraph (a) of this section;
  - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters of the company, (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and,
  - (3) The written authorization is submitted to the Director.
- c. Changes to authorization. If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.
- d. Certification. Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

3. Reopener Clause; at 40 CFR 122.44(c).

For any permit issued to a treatment works treating domestic sewage (including “sludge-only facilities”), the Director shall include a reopener clause to incorporate any applicable standard for sewage sludge use or disposal promulgated under section 405(d) of the CWA. The Director may promptly modify or revoke and reissue any permit containing the reopener clause required by this paragraph if the standard for sewage sludge use or disposal is more stringent than any requirements for sludge use or disposal in the permit, or controls a pollutant or practice not limited in the permit.

4. Transfer of permits; at 40 CFR 122.61.

- a. Transfers by modification. Except as provided in paragraph (b) of this section, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under 40 CFR 122.62(b)(2)), or a minor modification made (under 40 CFR 122.63(d)), to identify the new permittee and incorporate such other requirements as may be necessary under CWA.
  - b. Automatic transfers. As an alternative to transfers under paragraph (a) of this section, any NPDES permit may be automatically transferred to a new permittee if:
    - (1) The current permittee notifies the Director at least 30 days in advance of the proposed transfer date in paragraph (b)(2) of this section;
    - (2) The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
    - (3) The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify or revoke and reissue the permit. A modification under this subparagraph may also be a minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph (b)(2) of this section.
5. Minor modifications of permits; at 40 CFR 122.63.

Upon the consent of the permittee, the Director may modify a permit to make the corrections or allowances for changes in the permitted activity listed in this section, without following the procedures of 40 CFR 124. Any permit modification not processed as a minor modification under this section must be made for cause and with 40 CFR 124 draft permit and public notice as required in 40 CFR 122.62. Minor modifications may only:

- a. Correct typographical errors;
- b. Require more frequent monitoring or reporting by the permittee;
- c. Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement; or
- d. Allow for a change in ownership or operational control of a facility where the Director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittees has been submitted to the Director.

- e. Change the construction schedule for a discharger which is a new source. No such change shall affect a discharger's obligation to have all pollution control equipment installed and in operation prior to discharge under 40 CFR 122.29.

Delete a point source outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with permit limits.

- f. [Reserved]

- g. Incorporate conditions of a POTW pretreatment program that has been approved in accordance with the procedures in 40 CFR 403.11 (or a modification thereto that has been approved in accordance with the procedures in 40 CFR 403.18) as enforceable conditions of the POTW's permits.

6. Termination of permits; at 40 CFR 122.64.

- a. The following are causes for terminating a permit during its term, or for denying a permit renewal application:

- (1) Noncompliance by the permittee with any conditions of the permit;

- (2) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time;

- (3) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or

- (4) A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit (for example, plant closure or termination of discharge by connection to a POTW).

- b. The Director shall follow the applicable procedures in 40 CFR 124 or 40 CFR 122.22, as appropriate (or State procedures equivalent to 40 CFR 124) in terminating any NPDES permit under this section, except that if the entire discharge is permanently terminated by elimination of the flow or by connection to a POTW (but not by land application or disposal into a well), the Director may terminate the permit by notice to the permittee. Termination by notice shall be effective 30 days after notice is sent, unless the permittee objects within that time. If the permittee objects during that period, the Director shall follow 40 CFR 124 or applicable State procedures for termination. Expedited permit termination procedures are not available to permittees that are subject to pending State and/or Federal enforcement actions including citizen suits brought under State or Federal law. If requesting expedited permit termination procedures, a permittee must certify that it is not subject to any pending State or Federal enforcement actions including citizen suits brought under State or Federal



law. State-authorized NPDES programs are not required to use part 22 of this chapter's procedures for NPDES permit terminations.

7. Availability of Reports; pursuant to CWA section 308

Except for data determined to be confidential under 40 CFR 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Regional Administrator. As required by the CWA, permit applications, permits, and effluent data shall not be considered confidential.

8. Removed Substances; pursuant to CWA section 301

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials entering waters of the U.S.

9. Severability; pursuant to CWA section 512

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and remainder of this permit, shall not be affected thereby.

10. Civil and Criminal Liability; pursuant to CWA section 309

Except as provided in permit conditions on "Bypass" and "Upset", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

11. Oil and Hazardous Substances Liability; pursuant to CWA section 311

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the CWA.

12. State, Tribe, or Territory Law; pursuant to CWA section 510

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any applicable State, Tribe, or Territory law or regulation under authorities preserved by CWA section 510.

***C. Attachment C: Definitions***

1. "Average monthly discharge limitation" means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges"

measured during a calendar month divided by the number of “daily discharges” measured during that month.

2. “Average weekly discharge limitation” means the highest allowable average of “daily discharges” over a calendar week, calculated as the sum of all “daily discharges” measured during a calendar week divided by the number of “daily discharges” measured during that week.
3. “Best management practices” or “BMPs” are schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural, and/or managerial practices to prevent or reduce pollutants present in the discharge. BMPs include treatment systems, operating procedures, and practices to control (1) plant site runoff, (2) spillage or leaks, (3) sludge or waste disposal, or (4) drainage from raw material storage. BMPs may further be characterized as operational, source control, erosion and sediment control, and treatment BMPs.
4. “Composite” sample means a time-proportioned mixture of not less than eight discrete aliquots obtained at equal time intervals (e.g., 24-hour composite means a minimum of eight samples collected every three hours). The volume of each aliquot shall be directly proportional to the discharge flow rate at the time of sampling, but not less than 100 MRL. Sample collection, preservation, and handling shall be performed as described in the most recent edition of 40 CFR 136.3, Table II. Where collection, preservation, and handling procedures are not outlined in 40 CFR 136.3, procedures outlined in the 18th edition of Standard Methods for the Examination of Water and Wastewater shall be used.
5. “Daily discharge” means the “discharge of a pollutant” measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the “daily discharge” is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the “daily discharge” is calculated as the average measurement of the pollutant over the day.
6. “Daily maximum allowable effluent limitation” means the highest allowable “daily discharge.”
7. “DMR” is a “Discharge Monitoring Report” that is an EPA uniform national form, including any subsequent additions, revisions, or modifications for reporting of self-monitoring results by the permittee.
8. “Discrete” sample is a single sample collected at a particular time and place that represents the composition of the discharge only at that time and place. Sample collection, preservation, and handling shall be performed as described in the most recent edition of 40 CFR 136.3, Table II. Where collection, preservation, and handling

procedures are not outlined in 40 CFR 136.3, procedures outlined in the 18th edition of Standard Methods for the Examination of Water and Wastewater shall be used.

9. "Method detection limit" or "MDL" is the minimum concentration of an analyte that can be detected with 99% confidence that the analyte concentration is greater than zero, as defined by a specific laboratory method in 40 CFR 136. The procedure for determination of a laboratory MDL is in 40 CFR 136, Appendix B.
10. "Minimum level" or "MRL" is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The MRL is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed in a specific analytical procedure, assuming that all the method-specific sample weights, volumes, and processing steps have been followed (as defined in EPA's draft National Guidance for the Permitting, Monitoring, and Enforcement of Water Quality-Based Effluent Limitations Set Below Analytical Detection/Quantitative Levels, March 22, 1994). If a published method-specific MRL is not available, then an interim MRL shall be calculated. The interim MRL is equal to 3.18 times the published method-specific MDL rounded to the nearest multiple of 1, 2, 5, 10, 20, 50, etc. (When neither an MRL nor MDL are available under 40 CFR 136, an interim MRL should be calculated by multiplying the best estimate of detection by a factor of 3.18; when a range of detection is given, the lower end value of the range of detection should be used to calculate the MRL.) At this point in the calculation, a different procedure is used for metals, than non-metals:
  - a. For metals, due to laboratory calibration practices, calculated MRLs may be rounded to the nearest whole number.
  - b. For non-metals, because analytical instruments are generally calibrated using the MRL as the lowest calibration standard, the calculated MRL is then rounded to the nearest multiple of  $(1, 2, \text{ or } 5) \times 10^n$ , where  $n$  is zero or an integer. (For example, if an MDL is  $2.5 \mu\text{g/l}$ , then the calculated MRL is:  $2.5 \mu\text{g/l} \times 3.18 = 7.95 \mu\text{g/l}$ . The multiple of  $(1, 2, \text{ or } 5) \times 10^n$  nearest to 7.95 is  $1 \times 10^1 = 10 \mu\text{g/l}$ , so the calculated MRL, rounded to the nearest whole number, is  $10 \mu\text{g/l}$ .)
11. "NODI(B)" means that the concentration of the pollutant in a sample is not detected. NODI(B) is reported when a sample result is less than the laboratory's MDL.
12. "NODI(Q)" means that the concentration of the pollutant in a sample is detected but not quantified. NODI(Q) is reported when a sample result is greater than or equal to the laboratory's MDL, but less than the MRL.